PROCEEDINGS

ISAIA 2018

The 12th International Symposium on Architectural Interchanges in Asia

in the Age of Super Connectivity

CONFLUENCE OF ARCHITECTURE

October 23(Tue)~26(Fri), 2018

Pyeongchang Alpensia, Gangwon, Korea

社団法人 大韓建築學會
中國建筑学会 The Architectural Society of China
一般社団法人 日本建築学会

14:00~16:00 **Bobsleigh Hall(1F), Alpensia Convention Center**

Chair Jae-Han Lim (Ewha Womans University, Korea)

E1 Environmental Technologies

E1-1 A Study on Residential Lifelogs Based on Estimations from Electric Usage
Miona Kanno, Jeong-soo Kim, Yoshiki Higuchi
Musashino University, Japan

E1-2 Analysis of Energy Use and CO2 Emission Intensities by End Use for Public Use in Sample Apartment Complex through Measurement
Hye Sun Jin, Han Young Lim, Soo Jin Lee, Sung Im Kim, Jae Han Lim, Seung Yeong Song
Ewha Womans University, Korea

E1-3 Influence of Changes of Household Size and Age of Residents on Energy Consumption in Japan
Kozo Takase, Takashi Inoue, Yuki Kiyohara
Tokyo University of Science, Japan

E1-4 Modelling of a Domestic AHU using TRNSYS
Seung-Hoon Park, Eui-Jong Kim, Yong-Sung Jang
Inha University, Korea

E1-5 Proposal of Control Method for Thermo Active Building System based on Model Predictive Control
Yohei Ogawa, Yasuyuki Shiraishi
University of Kitakyushu, Japan

E1-6 A Study on the Comparative Analysis of Buildings' LCA for Green Building Certification Systems in Asian Developing Countries
Rudiliza Culiao, Sungho Tae, Rakhyun Kim
Hanyang University, Korea

E1-7 Characteristics of Annual Gas Consumption for Cooking by Family Types in Apartment Units
Soojin Lee, Youjeong Kim, Sungim Kim, Hyesun Jin, Hanyoung Lim, Jaehan Lim, Seungyeong Song
Ewha Womans University, Korea

16:30~18:30 **Daegwallyeong Room 1(1F), Alpensia Convention Center**

Chair Jie-Heerah Yun (Hongik University, Korea)

H2 Architectural History and Theory

H2-1 The Evaluation of Pyu Ancient Cities, Myanmar in Terms of Urban Planning
Yuki Yasui, Takeshi Nakagawa
Waseda University, Japan

H2-2 The Significant Meaning of the Conservation of Authenticity About Block Planning and Foundation Structure at Bayon Temple and other Angkor's Ruins
Takeshi Nakagawa, Yoshinori Iwasaki
Wasoeda University, Japan

H2-3 Spatial Structure of Historical Capital Cities of Burma (Amarapura and Mandalay) in Use of Traditional Measurement Units
Koji Yamada, Kosuke Matsubara, Akio Odake
Tamano Consultants Co., Ltd., Japan

H2-4 Early Modern Urban Development in Japanese Rural Enclaves
(Patterns on Remote Medieval Settlements Finding a Way to the World)
Diego Cosa Fernandez
Hōsei University (Tokyo), Spain

H2-5 Accumulation of Time - Baroque in Turin and Harbin
Songfu Liu, Yidan Liu, Jiang Chang
Harbin Institute of Technology, China

H2-6 Confluence of Architectural Characteristics and Concepts in Chinese Churches : History and Design Practice
Zhang Qu
Tongji University, China

H2-7 From Temperate to Tropical : The Design Method by Junzo Sakakura in Thailand Vocational School Project
Junichi Sawaki, Piyarat Nanta, Ravij Kuanprasert, Nobuyuki Ogura, Toru Irie
University of the Ryukyu & King Mongkut Institute of Technology Ladkrabang, Japan

Accumulation of Time---- Baroque in Turin and Harbin

Songfu Liu[1], Yidan Liu[2] and Jiang Chang[3]

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Abstract

Baroque architecture is a kind of architecture and decoration style developed from Renaissance architecture in Italy in the 17th and 18th centuries. It is characterized by its freeform appearance, pursuing dynamics, its affluent decoration and carving, and strong colors. It is often used with interspersed surfaces and elliptical spaces. It can use an intuitive appeal to shake the users of churches and houses. The Baroque architecture, whether in Turin or Harbin, is an "abnormal pearl" which have broken down the western classical and Renaissance routines. By taking the design of Guarini Guarino as an example we analyze the Baroque architecture in Turin carefully and further understanding combined with the Baroque architecture of Harbin and Turin. We find that there is still a certain difference between them in the structure of architecture, the decoration and the meaning of decoration. Under different times and cultural backgrounds, the skills of craftsmen could also be different. According to the differences we can show people's creativity in many aspects and the beauty of Baroque architecture. That is what we called the accumulation of time.

Keywords: Baroque; Turin; Guarini Guarino; Harbin; Daowai District

1. Introduction

Baroque architecture is a kind of architecture and decoration style developed from Renaissance architecture in Italy in the 17th and 18th centuries. It is characterized by its freeform appearance, pursuing dynamics, its affluent decoration and carving, and strong colors. It is often used with interspersed surfaces and elliptical spaces. It can use an intuitive appeal to shake the users of churches and houses. At the end of the 19th century, Harbin emerged the fusion of national culture and thought between Russia and China, forming a new architectural style with the combination of Chinese and Western culture, known as the Chinese Baroque. The first time I knew about Baroque architecture in Turin was in the course of Prof. Paolo Cornaglia, who come from Politecn Turin. After the course, I checked the relevant information and found that there are some similarities and differences between Baroque architecture in Turin and Harbin. In this paper will talk about both character and summary the similarities and differences between them.

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2. Baroque in Turin （Taking the design of Guarini Guarino as an example.）

The Duke invested Guarini with the construction of ducal engineer to construct the dome to the Chapel of the Shroud in December, 1666. However, outside this formal duty, he was employed by the Duke's sister and the Savoy-born Emanuele Filiberto, Prince of Carignano. For this personality he built the Palazzo Carignano in Turin. Construction started in 1679 when the Prince was 51 years of age. This probably the best princely European residence in the second half of the seventeenth century, with close references to the recent works of Bernini and Borromini, and the renovation of the feudal Castle of Racconigi, outside Turin.

Guarini designed a structure in the shape of a square. He had a straight and restrained east faced created and an elliptical faced on the west. Guarini also added a forecourt at the center of the palace. The decorations over the windows of the main floor recall the campaign of the Carignano family with Carignan-Salières Regiment against the Iroquois in 1667. The interior has always been described as lavish and has splendid frescoes and stucco decorations. Among the frescoes are some by Stefano Legnani, called the Legnanino. The main stairwell is decorated with busts by Pietro Somazzi.

The architecture is constructed in brick in a

typical Baroque style, has an elliptical main faced. This faced represents the only example of civic architecture making use of the undulating “concave - convex - concave” rhythm established by Francesco Borromini in the church of San Carlo alle Quattro Fontane in Rome.

Fig.1. The Po Gate.

Guarini build an ornamental gate in the early fortifications of Turin, Po Gate, a gate leading to the bridge over the Po. The bridge itself has long vanished. However, the gate is illustrated in a surviving copper engraving in his civil architecture and exhibited typical touches of Guarini’s design influenced by Borromini, with angled blocks on each side of an outwardly-curved center-piece.

Three obelisks appear above, the central one raised on blocks, over the arms of the Principality and the heraldic bull of Turin below. A naked male figure with a bull’s head flank the central skyline, and a semi-clad female figure, bearing overhead a laurel wreath, is set between the freestanding columnar shafts on either side of the gate. The visual power of this construction would have been marred by the bastion which lay in front of it, as borne out by the contemporary engraving by Giovanni.

3. Baroque in Harbin （Taking Daowai District in Harbin as an example.）

The name of "Chinese Baroque" was proposed by a Japanese scholar named Nishizawa Yasuhiko. The beginning of the Baroque architecture art was in Italy in seventeenth Century, and "Chinese Baroque" is simply to say that is the Baroque in China, that is to say the formation of the Chinese Baroque style of Chinese architecture. Chinese Baroque architecture remain in Harbin, Wuhan, Beijing and many other cities, and the largest and most complete Chinese Baroque architecture is in Daowai District of Harbin.

At No.412 Jingyu Street Daowai District, an architecture for Chunhua Hospital is a typical representative of Chinese Baroque. The architecture was originally Tongyiqing Department store, built in 1920. From the overall composition to the details of the processing, the architecture are strongly reflected the form of Chinese Baroque. The architecture is of brick and concrete structure and full of relief decoration made of plaster. The main entrance is located at the intersection of Jingyu Street and Nantou Street, on both sides of the entrance are two double leaning columns with western ionic capital and Chinese drum base column. The pattern of bats and suspicious clouds on the architrave, just above the entrance, are true to life. Further up, the two single columns are decorated with Chinese knot pattern has been extended to meet with the arch. The Chunhua Hospital plaque is surrounded by the decoration of exquisite chrysanthemum in the area of columns and arch.

Fig.2. Chunhua Hospital.

Fig.3. Hendry glasses shop.

Hendry glasses shop, a class III protection architecture, built in 1925, is writing their own history. Now, the main entrance of the old Hendry is located at the intersection of Jingyu Street and South Six Street, decorated with a square dial with words “Hendry” and “1923”. This old Chinese Baroque architecture is two layers of brick and wood structure, colored with blue and yellow. Kinds of relief decoration surrounded the European style windows. It is not difficult to imagine its style although the parapet across six windows has color mottled and relief decoration which is decorated with plants and flowers has been eroded by wind and rain.

Today, when I walking on the Jingyu Street of Daowai District in Harbin, it seems to walk into an exhibition of Chinese Baroque architecture. After years of erosion, many of the buildings are old, but by looking through their damaged appearance, it is not difficult to imagine their noble and gorgeous characters.

4. Comparison

The Baroque architecture is a “abnormal pearl” that breaks down the western classical and Renaissance routines. People thought that it had a derogatory sense at that time and was a derogatory of the Renaissance style, but now, people have recognized that Baroque is a great art style in Europe.

There are four aspects of the main features of Baroque architecture in Turin. First is to show off the wealth, a large number use of precious materials color and full of decoration. Such as the main stairwell of Palazzo Carignano is decorated with busts by Pietro Somazzi. Second is the pursuit of novelty, unprecedented architectural image and techniques emerge in endlessly, break the normal procedure of painting and sculpture, so that they penetrate each other. Third is the trend of nature, the architecture is gradually open and more and more decoration of the natural theme. Like Po Gate, A naked male figure with a bull s head flank the central skyline, and a semi-clad female figure, bearing overhead a laurel wreath, is set between the freestanding columnar shafts on either side of the gate. Guarini use naked male and bull instead of God or other symbol of mythical. The last one is lively atmosphere.

By the beginning of twentieth Century, with the prosperity of the national industry and the infiltration of foreign culture, there have been a number of new architectures affected by the western culture of architecture. Thanks to the technical skills and wisdom minds, people here in Harbin combined the two different cultures together, the traditional Chinese architecture style and the western Baroque architecture style, invented a new architecture style, called “Chinese Baroque Architecture”.

There are three characteristics of the Chinese Baroque architecture in decoration. First is Interwoven together the Chinese brackets, stairs and railings and western architectural column, Pediment. Such as the Chunhua Hospital use the western column and China brackets and deformation treatment the western classical pillar. The column is western, but the decoration is Chinese, which in western architecture are not. The Baroque is to break the rationality, the craftsmen have no arbitrary restrictions and fetters, a variety of decorative perform to various parts. Second, relief decoration with plants and flowers is to express the cultural connotation of auspicious wealth, fertility. Such as grapes, pomegranates symbolize fertility and peony, plum, lotus and Begonia symbol of wealth, with a variety of plants in a big basket symbolizes a bumper grain harvest. Third, in the structure, with a wealth of decorative rendering of the lively atmosphere. Inside the house, they use all of the Chinese style courtyard and often constitute a group of neighborhood.

5. Discussion and Conclusion

According to the analysis of Baroque architecture in Turin and Harbin and the comparison of them between two different periods, we can find that there are many differences and only a little similar between them. There are many scholars in China doing research on the Chinese Baroque in Harbin. Some of them think that Chinese Baroque is a branch of Baroque which combined with Chinese traditional culture during its development. But others believe that it is just a product of the integration of eastern and western cultures and not belongs to the real Baroque. In my opinion, Chinese Baroque is an important part of Chinese culture despite it comes from other place.

Historical architectures sometimes fail to meet the needs of today's development, but we are trying best to protect them. For the government, there should be a reasonable and enforceable policy; for individuals, there should be a sense of protection and cherish; for scholars, there should be a serious and responsible attitude. Whatever in Turin or in Harbin the protection of historical architectures is the epitome of our historical development, and it is an indispensable part of the imprint of time.

6. References

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